

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

BLUE SPIKE, LLC  
*Plaintiff,*

v.

TEXAS INSTRUMENTS, INC.  
*Defendants*

Civil Action No. 6:12-CV-499 MHS

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LEAD CASE

**DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF**

Pursuant to P. R. 4-5(b), Defendants Iritech, Inc., Futronic Technology Co., Ltd., Fulcrum Biometrics LLC, Audible Magic Corporation, Photobucket.com, Inc., Qlipso, Inc., Qlipso Media Networks Ltd., Zedge Holdings, Inc., Mediafire, LLC., Dailymotion, Inc., Dailymotion S.A., GoMiso, Inc, iMesh, Inc., Coincident.TV, Inc., Facebook, Inc., MySpace, LLC, Specific Media, LLC, Yap.tv, Inc., Metacafe, Inc., Boodabee Technologies Inc., Harmonix Music Systems, Inc., Brightcove, Inc., Accedo Broadband AB, Accedo Broadband NA, Inc., Soundcloud, Inc., Soundcloud Ltd., WiOffer, LLC, Myxer, Inc., Attributor Corporation, Viggle Inc., Shazam Entertainment Limited, MorphoTrust USA, Inc., L-1 Identity Solutions, Inc., MorphoTrak, Inc., Safran USA, Inc., Irdeto USA, Inc., Irdeto B.V., Last.fm Ltd., CBS Interactive, Inc., Infinisource, Inc., Qquest Software Systems, Inc., SMRTV, Inc., The Nielsen Company (US) LLC, Clear Channel Broadcasting, Inc., 3M Cogent, Inc., Entropic Communications, Inc., Cognitec Systems GmbH, Cognitec Systems Corp., Civolution USA, Inc., Civolution B.V., Airborne Biometrics Group, Inc. (collectively, “Defendants”), hereby submit this Claim Construction Brief on the Blue Spike patents: U.S. Patent Nos. 7,346,472 (the “472 patent”), 7,660,700 (the “700 patent”), 7,949,494 (the “494 patent”), and 8,214,175 (the “175 patent”) (collectively “the Asserted Patents”).

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## INTRODUCTION

Blue Spike's proposed constructions violate fundamental concepts of patent law in an attempt to capture technology never envisioned, much less disclosed, in the asserted patents. In many cases, Blue Spike argues that no construction is required and improperly urges the Court to leave it up to the jury to try to discern the meaning of the claims. Blue Spike's approach is particularly improper here given the highly complex nature of the technology and the asserted claims. Indeed, Blue Spike even admits that the key term in the patent – “abstract” is “impossible” to construe. It has overreached in its claim construction approach in order to accuse a myriad of unrelated technologies. As a result, its claim construction arguments make little sense as a matter of fact or law.

Defendants, on the other hand, have proposed constructions that track the plain language of the claims, specification, and prosecution history. Notably, Blue Spike provides little to no support from the intrinsic record for its arguments, relying only on attorney argument. For that reason alone, Blue Spike's constructions should be rejected.

Notwithstanding that Blue Spike's unreasonable positions require construction of a large number of terms, Defendants respectfully request that the Court prioritize construction of a handful of terms that have broad applicability across nearly all claims: (Section I) Abstract; (Section II) Match; (Sections VII and IX) Reference/Query Signal; (Section VI) Version of [the] Reference Signal; and (Sections XV and XVI) Cryptographic Protocol/Hash.<sup>1</sup> Construction of these key terms, particularly, “abstract,” is likely to be case dispositive or at least streamline the case and bring resolution to a number of disputed issues.

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<sup>1</sup> For convenience, all of the terms to be construed are addressed in this brief in the order in which they were presented in the joint claim construction statement, and Blue Spike's brief. However, Defendants primary focus will be on these key, potentially case dispositive, terms.

## THE PROPER CONSTRUCTIONS FOR THE DISPUTED CLAIM TERMS

### I. Abstract

Term	Defendants	Blue Spike
Abstract	<b>All Defendants (except Morpho Defendants)<sup>2</sup></b> “A data-reduced representation of a reference or query signal that is the smallest amount of data that can represent and differentiate two signals for a given predefined signal set and that retains a perceptual relationship with the original signal”  <b>Morpho Defendants</b> Indefinite To the extent the Court finds this term is definite, Morpho proposes:“a reduction that preserves an aesthetic quality of the original signal”	No construction required.

“Abstract” is the primary alleged point of novelty in the patents-in-suit. Notwithstanding the heavy reliance on this fact during prosecution,<sup>3</sup> Blue Spike argues that this key term in the patents should not be construed. Blue Spike makes no attempt to offer any construction, and in fact, admits that construction is “impossible.” Dkt. 1700, Blue Spike Opening Claim Construction Brief (“Op. Br.”) at 8. Blue Spike’s assertion that a construction is *impossible* is an admission that the term is indefinite. *See* Defendants’ Motion for Summary Judgment of Indefiniteness (“Indefiniteness MSJ”), filed concurrently with this brief. In the event that the Court does not find the claim indefinite, then the majority of Defendants and the Morpho Defendants propose alternative constructions of “abstract,” as set forth below. The Court’s interpretation of “abstract” likely will be case-dispositive, so the term should be construed. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co. Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“When the parties present a fundamental dispute regarding the scope of a claim term, it is the

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<sup>2</sup> As discussed in certain Defendants’ Motion for Summary Judgment of Indefiniteness, “abstract” is indefinite, based at least in part on Blue Spike’s admission that a single construction for abstract is “impossible.”

<sup>3</sup> *See e.g.* Declaration of Christopher Higgins in Support of Defendants’ Responsive Claim Construction Brief (“Higgins Decl.”), Ex. 1 (‘472 FH, Response to 7/22/04 OA at p. 7) (arguing over prior art on the basis that prior art did not contain “the Applicants’ ‘abstract’.”)

court's duty to resolve it.”).

#### A. Abstract: All Defendants Except The Morpho Defendants

##### i. The Abstract Is Data-reduced And The Smallest Amount of Data That Can Differentiate Signals

Confusingly, the specification never actually describes what constitutes an “abstract.”<sup>4</sup>

However, the specification does provide a description that is a starting point,<sup>5</sup> as follows:

*“As a general improvement over the art, the present invention* incorporates what could best be described as ‘computer-acoustic’ and ‘computer-visual’ modeling, where *the signal abstracts are created using data reduction techniques to determine the smallest amount of data, at least a single bit, which can represent and differentiate two digitized signal representations for a given predefined signal set.* Each of such representations must have at least a one bit difference with all other members of the database to differentiate each such representation from the others in the database.”

Col. 10:9-19 (emphasis added).<sup>6</sup> It is settled that where, as here, the specification “describes the features of the ‘present invention’ as a whole, this description limits the scope of the invention.”

*Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007); *Netcraft Corp. v. eBay, Inc.*, 549 F.3d 1394, 1398, 1400 n.1 (Fed. Cir. 2008) (“specification’s repeated use of the phrase ‘the present invention’ describes the invention as a whole”; statements defining “the present invention” also defeat contrary presumptions that may arise from the doctrine of claim differentiation).<sup>7</sup>

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<sup>4</sup> The specification’s failure to describe the abstract renders the patent invalid for at least lack of written description, as is required by 35 U.S.C. § 112(a).

<sup>5</sup> Every asserted claim includes the limitation of “creating an abstract” in one form or another. The parties agreed to construe the singular term “abstract,” so Defendants include the features of the creation process in their definition of “abstract.” Because “abstracts” must be created using this process, these features must be present in all “abstracts.” Regardless, should the Court find that “the smallest amount of data” requirement be more appropriately included with the term “creating an abstract,” Defendants would be amenable to such a construction.

<sup>6</sup> Unless otherwise indicated, all references to the specification in this brief are to the column and line numbers of the ‘472 patent.

<sup>7</sup> See also *Honeywell Int’l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (limiting claims to a fuel filter where “the written description refers to the fuel filter as ‘this invention’ or ‘the present invention’”).

The abstract's creation process starts with a predefined signal set. 10:9-19. From this predefined set, digitized signal representations are created. *Id.* Those digitized signal representations are input to the abstract creation process. *Id.* The goal of the creation process is to create abstracts that both: (1) represent the signals and (2) differentiate between the signals. *Id.* To accomplish this goal, the process first determines the smallest set of data that can both represent the signals and differentiate between the signals. *Id.* Once the smallest amount of such data is determined, that data is used to create the abstract. *Id.*

The specification's description of the abstract creation process at 10:9-19 is consistent with the rest of the disclosure, which states that the goal of the invention is to *reduce* the data overhead in the abstract:

“The challenge is to maximize the ability to sufficiently compress a signal to both retain its relationship with the original signal while **reducing the data overhead** to enable more efficient analysis, archiving and monitoring of these signals.”

9:47-51. This goal—reduced data overhead—is met because the abstract is the smallest amount of data that can represent and differentiate between signals. The necessity of this data reduction is emphasized repeatedly throughout the specification. *See* 7:3-9 (referring to “[t]he ability to *massively compress* a signal to its essence...” where such compression is “designed to preserve some underlying ‘aesthetic quality’ of the signal...”); 3:52-55 (“a primary concern is the ability to *reduce the digital signal* in such a manner as to retain a ‘perceptual relationship’ between the original signal and its *data reduced version*.); 7:36-55 (original signal “*compressed to create a realistic or self-similar representation of the original signal*, so that the compressed signal can

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Descriptions of “the present invention” as a whole limit the claims even if the claim language, standing alone, might be interpreted differently. *SciMed*, 242 F.3d at 1341; *Alloc*, 342 F.3d at 1368-70 (“where the specification makes clear at various points that the claimed invention is narrower than the claim language might imply, it is entirely permissible and proper to limit the claims”). This is proper because “[t]he public is entitled to take the patentee at his word.” *Honeywell*, 452 F.3d at 1318. Statements defining “the present invention” also defeat contrary presumptions that may arise from the doctrine of claim differentiation. *See Netcraft*, 549 F.3d at 1400 n.1.

be referenced at a subsequent time as unique binary data that has computational relevance to the original signal.”); 14:19-27 (“similarity may exist between the data *compressed abstractions of different analog signals...*”); 15:3-8 (“[t]he present invention, however, involves the scanning of an image involving a sun, compressing the data to its essential characteristics (i.e., those perceptual characteristics related to the sun)....”).<sup>8</sup> The intrinsic record is replete with descriptions of the abstracts being the smallest possible, massively compressed, data reduced versions of an original signal. Blue Spike cannot now change course and attempt to redefine a key term in the patents-in-suit.<sup>9</sup>

## ii. The Abstract Must Retain a Perceptual Relationship

Blue Spike admits that the data in abstracts must retain a perceptual relationship to their original signal. Op. Br. at 9 (“perceptual relationship common to the abstracts taught in the patents-in-suit.”). Similarly, in the complaints in this case, Blue Spike asserts: “Broadly speaking, ‘*signal abstracting*’ identifies digital information and material—including video, audio, graphics, multimedia, and text—*based solely on the perceptual characteristics of the material itself.*” See e.g. Dkt. 1400 at ¶ 46 (emphasis added).

The specification and prosecution history repeatedly confirm this fact:

- “While there are many approaches to data reduction that can be utilized, a primary concern is the ability to reduce the digital signal in such a manner as to *retain a*

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<sup>8</sup> See also Higgins Decl. Ex. 7 ('700 FH Response to 3/5/09 OA) at 17-18 (To overcome a prior art rejection the applicants argued that abstracts were data reduced, rather than adding information: “[a]bstracts as claimed do not cause original data to be exposed unnecessarily.”; arguing that prior art “unnecessarily exposes original data & uses ‘additive information’ not the more computationally beneficial ‘abstracts’ of the claims.”).

<sup>9</sup> The majority group of Defendants’ construction diverges from the Morpho Defendants’ proposed construction, discussed below, primarily on the point discussed in this section. All of the Defendants, including Morpho Defendants, agree that some kind of reduction of the original signal is required, and that the reduction preserves certain qualities of the original signal. Most Defendants adhere to the express definition of an abstract requiring that the abstract constitute the smallest amount of data that can represent and differentiate two signals for a given predefined signal set—which the patentee applied to the “present invention.” The Morpho Defendants are persuaded by other language in the specification, discussed below.

*‘perceptual relationship’ between the original signal and its data reduced version.’* 3:52-55.

- ***“That is to say, the signal is compressed to retain what is ‘humanly-perceptible.’*** As long as the compression successfully mimics human perception, data space may be saved when the compressed file is compared to the uncompressed or original file.” 7:36-55.
- ***“The challenge is to maximize the ability to sufficiently compress a signal to both retain its relationship with the original signal while reducing the data overhead*** to enable more efficient analysis, archiving and monitoring of these signals.” 9:47-51.
- The applicants argued that “signal characteristics parameters,” which were added by amendment, distinguished over the Logan reference because Logan does “not teach ... using perceptual qualities” Higgins Decl. Ex. 7 at 14, 15.

During prosecution, Mr. Moskowitz<sup>10</sup> (who signed the office actions responses personally), consistently argued to the patent examiner (who examined all 4 patents-in-suit) that an “abstract” requires a perceptual relationship to a signal from which it is derived. To secure both the ‘472 and ‘700 patents, Moskowitz explicitly argued that pending claims, which used the word “abstract” but did not expressly use the words “perceptual relationship,” distinguished over Logan (US 6,088,455) because of a perceptual relationship. Higgins Decl. Ex. 7.

In particular, Moskowitz argued that application claim 21 of the ‘700 patent (which ultimately issued as claim 1 of the ‘700 patent) distinguished over Logan because “[s]ignal abstracts retain a perceptual relationship with the signal from which it was created or derived.” Higgins Decl. Ex. 7 at 19 (arguing generally regarding the claims “[s]ignal abstracts retain a perceptual relationship with the signal from which it was created or derived.”). The text of then pending claim 21 and the resultant issued claim 1 failed to explicitly recite this “perceptual relationship.” Higgins Decl. Ex. 7 at 7. Moskowitz made similar arguments in the ‘472 file history about pending claims that did not explicitly recite “a perceptual relationship” element.

*See Higgins Decl. Ex. 2 (‘472 FH Response to 5/11/07 OA) at 10, referencing originally filed*

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<sup>10</sup> Scott Moskowitz is one of the named inventors of the Asserted Patents and the CEO of Blue Spike. Mr. Moskowitz earned degrees in business and financing and was employed in sales and marketing positions prior to starting Blue Spike, Inc. Mr. Moskowitz holds no technical background or relevant industry experience with respect to content recognition.

claims 1, 6, 8, 12, 13, 18, 19, and 21-23 (“Logan allegedly discloses additive information, the ‘informational signal’, ***having no relationship with the perceptual nature of the reference signal.*** The present invention(s) is not so limited.”). It is settled that generally “the same claim term in the same patent or related patents carries the same construed meaning.” *See Omega Eng’g, Inc, v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003); *see also Seachange Int’l, Inc. v. C-Cor, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005) (definition during prosecution overcomes claim differentiation doctrine). Given Moskowitz’s global position during prosecution that an “abstract” itself has a perceptual relationship to an original signal, that construction is appropriate across all claims and all patents.

**B. Blue Spike Wrongly Asserts That “Abstract” Does Not Need To Be Construed<sup>11</sup>**

Blue Spike ignores the entire specification and prosecution history, including virtually no citation to either in its argument. Indeed, it is hardly surprising given that there is nothing in the intrinsic record that supports Blue Spike’s position. As a result, Blue Spike concedes that “a single definition [of abstract] is impossible to achieve.” Op. Br. at 8. This is the hallmark of indefiniteness because a claim term must be construed consistently across all claims in a patent and across all claims in the same patent family. *See Omega Eng’g, Inc, v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003) (“[W]e presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.”); *Inverness Med. Switzerland GmbH v. Princeton Biomeditech Corp.*, 309 F.3d 1365, 1371 (Fed. Cir. 2002) (“A claim term used in multiple claims should be construed consistently … and it makes no difference that claims [refer to further modifiers of the claim term]”); *Southwall Technologies, Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1579 (Fed. Cir. 1995) (“The fact that we must look to

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<sup>11</sup> This section is adopted by all Defendants except the Morpho Defendants.

other claims using the same term when interpreting a term in an asserted claim mandates that the term be interpreted consistently in all claims.”).<sup>12</sup>

Because Blue Spike believes a construction of “abstract” is impossible, it offers no construction and instead puts forth four positions against Defendants’ construction, each supported only by attorney argument and each contradicted by the intrinsic record.

### **i. Data-reduced representation**

Blue Spike argues that because the last asserted patent in the chain of continuations, the ’175 patent, has “data-reduced” in the claim, then “data-reduced” cannot be part of an abstract for all other claims in the patent family. Op. Br. at 8, 9. That argument ignores the law that a patentee cannot change the meaning of a term in a continuation patent. *See, e.g., Callicrate v. Wadsworth Mfg., Inc.*, 427 F.3d at 1369; *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005). The same term must be construed consistently across all patents in the same family. *Id.* The argument also ignores that, at the outset of prosecution, in the specification, Blue Spike expressly defined the creation of the “abstract” of the “present invention.”

Defying all logic, Blue Spike then argues that an abstract does not have to be smaller than its reference signal – it can be bigger. Op. Br. at 9. No evidence supports Blue Spike’s baseless assertion that “it is conceivable that an abstract may be larger than its representative signal” (Op.

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<sup>12</sup> See also *CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146 (Fed. Cir. 1997) (“there is no reasoned basis to apply different definitions to the same term used in two claims of the same patent”); *Nazomi Communications, Inc. v. ARM Holdings, PLC.*, 403 F.3d 1364, 1370 (Fed. Cir. 2005) (“The court must consider not only that different embodiments are possible, but also that the meaning of ‘instruction’ in the claims must be the same in all of them.”); *Callicrate v. Wadsworth Mfg., Inc.*, 427 F.3d 1361, 1369 (Fed. Cir. 2005) (applying construction of term based on first patent to same term of different patent where the two patents were related and had identical specifications); *Boss Industries, Inc. v. Yamaha Motor Corp. U.S.A., Inc.*, 2009 WL 1475036, \*5 (Fed. Cir. 2009) (giving the same construction to the term “base section” as used in three related patents that shared a common specification, and rejecting patentee’s argument that aspects of the various specifications supporting giving the term a different meaning for each patent).

Br. at 11; *see also* Op. Br. at 9), and Blue Spike cites to none in its Claim Construction Brief. To the contrary, the specification states that “[t]he challenge” the alleged invention attempts to addresses is to “maximize the ability to sufficiently compress a signal to both retain its relationship with the original signal while reducing the data overhead to enable more efficient analysis....” 9:47-50.<sup>13</sup>

Further, if Blue Spike’s assertion were true, the asserted patents would be invalid for lack of written description and lack of enablement, as there is no description at all of an abstract that is greater in size than the original. *See e.g. Auto. Techs. Int’l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1283-1284 (Fed. Cir. 2007) (where specification failed to disclose structure for operation of an alleged embodiment or how one of ordinary skill in the art would make or use it, such was not enabled); *Whittaker Corp. v. UNR Indus., Inc.*, 911 F.2d 709, 712 (Fed. Cir. 1990).

The specification and prosecution history stress that the abstract is a compressed/compact representation/ data reduced version of an original signal. This was allegedly the entire purpose of an abstract. The abstract is intended to be the smallest amount of data to get the comparing job done.

## **ii. Smallest amount of data**

Blue Spike also takes issue with the inclusion of “smallest amount of data” in Defendants’ construction. Blue Spike goes so far as to argue that the phrase “smallest amount of data” “is not present in the intrinsic record.” Op. Br. at 9. This is simply false. As discussed at length, the phrase “smallest amount of data” appears in the specification in the paragraph describing the “abstract” of the “present invention,” and defined as the point of novelty “over the

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<sup>13</sup> In general, creating an abstract larger than the original signal is in tension with the stated purposes of the alleged invention to use the signal itself—without additive information. 4:56-60 (“[r]eliance on an additive signal has many shortcomings”). The specification further notes that because “maintenance of original signal quality is not required,” the alleged invention provides the benefit of “increased efficiencies in processing and identification of signals.” 9:40-45.

art.” *See supra* Section I.A.i. Defendants’ proposed construction tracks this description of abstract. Blue Spike cannot now attempt to escape the clear language of the specification.

Further demonstrating the incoherence of its position, Blue Spike argues that making an abstract the smallest possible size would lose the “perceptual relationship common to the abstracts in the patents-in-suit.” Op. Br. at 9. This mischaracterizes both Defendants’ position and the language of the specification defining “abstract.” The specification does not refer to the smallest possible size that an abstract could possibly be, in general, but rather the smallest size *that can differentiate two signals*. Thus, an abstract cannot be infinitesimally small, but it must be the smallest possible size based upon the predefined signal set such that all abstracts are distinguishable from all others based upon perceptual characteristics.

### **iii. Retains a perceptual relationship**

In its brief, Blue Spike concedes that a “perceptual relationship [is] common to the abstracts in the patents-in-suit.” Op. Br. at 9. This is entirely consistent with Defendants’ position that an abstract “retains a perceptual relationship” with an original signal. Just a page after making that concession, Blue Spike changes course and attempts to assert the opposite view that the “inventors specifically reserved this for dependent claims.” *Compare* Op. Br. at 9 and 10. However, the dependent claim that Blue Spike relies on for this argument (‘494 patent, claim 18) does *not* discuss the definition of abstract at all. Rather, that claim simply says that the “characteristics of the reference signal being described” may be “a perceptual quality” among other things. In other words, the claim relied upon by Blue Spike does not relate to the definition of abstracts at all, but relates to the nature of the original signal, and thus does not support Blue Spike’s argument. And even if the claims did recite characteristics of abstracts, the fact that an abstract comprises a “perceptual quality” or other characteristics would not be inconsistent with that same abstract retaining a perceptual relationship with the original signal. Blue Spike’s

argument does not work even if it had not mischaracterized the dependent claim language.<sup>14</sup>

#### iv. Predefined signal set

Blue Spike's argument against the inclusion of "predefined signal set" is difficult to comprehend. An abstract must be unique and have at least one bit of difference to all other abstracts in a given signal set. Without a predefined signal set, an abstract cannot be properly created because there is not a minimum data target that it must meet. That is, in order to be compared to a set of reference signals, or to be added to a set of reference signal abstracts, there must exist some predefined set of reference signal abstracts. This is clear from the only discussion of "abstract" in the specification, and is evident from the patents' twin goals of maintaining small, efficient data structures and accurately distinguishing unique signals.

### C. Abstract: Morpho Defendants

As explained in the Indefiniteness MSJ, the term "abstract" is indefinite. However, to the extent the Court finds this term is definite, it is "clearly a term that does not have a plain and ordinary meaning that is readily apparent to a lay person." *See Prolifiq Software, Inc. v. Veeva Systems Inc.*, No. C 13-03644 SI, 2014 WL 3870016, at \*8 (N.D. Cal. Aug. 6, 2014). In fact,

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<sup>14</sup> Moreover, Moskowitz' express description in the specification and his repeated affirmation during prosecution that "[s]ignal abstracts retain a perceptual relationship with the signal from which it was created or derived," overcomes any application of the claim differentiation doctrine. *See Fantasy Sports Props. v. Sportsline.com*, 287 F.3d 1108, 1115-16 (Fed. Cir. 2002) ("Claim differentiation serves best as a guideline, rather than a rule" and can be "overcome by ... disclaimer of subject matter in the prosecution history."); *Netcraft Corp. v. eBay, Inc.*, 549 F.3d 1394, 1400 (Fed. Cir. 2008) ("Furthermore, even if we agreed with Netcraft that the district court's claim construction led to some redundancy, that alone would not necessarily warrant a different result in this case. While claim differentiation may be helpful in some cases, it is just one of many tools used by courts in the analysis of claim terms. *See, e.g., Nystrom v. Trex Co.*, 424 F.3d 1136, 1142-43 (Fed. Cir. 2005) (construing the term "board" to mean a "piece of elongated construction material made from wood cut from a log," even though principles of claim differentiation suggested that the term "board" should not be limited to wood cut from a log."); *Seachange Int'l, Inc. v. C-COR Inc.*, 413 F.3d 1361, 1368-1369 (Fed. Cir. 2005) (claim differentiation is "not a hard and fast rule and will be overcome by a contrary construction dictated by the written description or prosecution history."); *see also Kraft Foods, Inc. v. Int'l Trading Co.*, 203 F.3d 1362, 1368 (Fed. Cir. 2000) (determining that any presumption arising from the doctrine of claim differentiation was overcome by the written description and prosecution history).

Blue Spike claims Mr. Moskowitz coined the term “signal abstracting.” *See, e.g.*, D.I. 1402, FAC at ¶ 12. Thus, in the alternative, the Morpho Defendants propose that this term means: “a reduction that preserves an aesthetic quality of the original signal.”

**i. “a reduction” is consistent with the specification and asserted claims**

For the reasons stated above, the Morpho Defendants agree with the other Defendants an “abstract” must be less than the original signal, *i.e.*, “a reduction,” as this is fully supported by the intrinsic record. *See, e.g.*, ‘472 patent at 3:52-56 (“a primary concern is the ability to *reduce the digital signal* in such a manner as to retain a ‘perceptual relationship’ between the original signal and its *data reduced version*.); *id.* at 7:40-43 (“While psychoacoustic and psychovisual compression has some relevance to the present invention, additional *data reduction* or massive compression is anticipated by the present invention.”). The Morpho Defendants, however, disagree with the other Defendants that an “abstract” must be the *smallest amount of data* that can represent and differentiate two signals *for a given predefined signal set*.

**ii. The Abstract “preserves an aesthetic quality” of the signal**

The Morpho Defendants further contend that an “abstract” “preserves an aesthetic quality of the original signal.” The “aesthetic” quality, or characteristic, of a signal, *i.e.*, that permits a person to recognize, perceive, or appreciate it, is emphasized throughout the Asserted Patents. *See, e.g.*, ‘472 patent at 4:42-43; 6:52-53; 7:9-27. In particular, the specification avers that:

The ability to massively compress a signal to its essence—which is not strictly equivalent to ‘lossy’ or ‘lossless’ compression schemes or perceptual coding techniques, but designed to preserve some underlying ‘*aesthetic quality*’ of the signal—representing a useful means for signal analysis in a wide variety of applications. The signal analysis, however, must maintain the ability to distinguish the *perceptual quality* of the signals being compared.

*Id.* at 7:3-14 (emphasis added).

The Morpho Defendants agree with the other Defendants, as discussed above, that the

“perceptual” features of signals and their “abstracts” pervade the intrinsic record and were the primary feature that the applicant argued to distinguish the purported invention during prosecution. *See Higgins Decl. Ex. 2 at 10 (“Logan fails to disclose the step of creating an abstract of said at least one reference signal. Logan allegedly discloses additive information, the ‘informational signal’, having no relationship with the perceptual nature of the reference signal. The present invention(s) is not so limited.”)* (emphasis added); *see also Higgins Decl. Ex. 7* (explaining that “[s]ignal abstracts retain a *perceptual relationship* with the signal from which it was created or derived.”) (emphasis added).

However, while “abstract” appears in all of the independent claims, some of the dependent claims narrow the abstract to having perceptual, cognitive, subjective, perceptible, and/or recognizable features, qualities, and/or characteristics of the underlying signal. *See, e.g., ‘700 patent, cl. 8; ‘494 patent, cl. 5, 18.* The doctrine of claim differentiation requires a term in an independent claim to be broader than the narrowing of that term in a dependent claim. *See, e.g., Karlin Tech., Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 972 (Fed. Cir. 1999) (The doctrine of claim differentiation “normally means that limitations stated in dependent claims are not to be read into the independent claim from which they depend”). As such, the term “abstract” must have a broader construction than perceptual, cognitive, subjective, perceptible, and/or recognizable features, qualities, and/or characteristics.<sup>15</sup>

The patents themselves provide a description that encompasses all of the narrower features of the dependent claims, including perceptual, cognitive, subjective, perceptible, and/or recognizable features, qualities, and/or characteristics of the underlying signal: “The ability to

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<sup>15</sup> Moreover, because “there is still a presumption that two independent claims have different scope when different words or phrases are used in those claims,” this construction also comports with narrower, unasserted, independent claim 1 of the ‘472 patent. *Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005).

massively compress a signal to its essence—which is not strictly equivalent to ‘lossy’ or ‘lossless’ compression schemes or perceptual coding techniques, but *designed to preserve some underlying ‘aesthetic quality’ of the signal.*” *Id.* at 7:3-14 (emphasis added).

As such, the Morpho Defendants’ construction that requires “a reduction that preserves *an aesthetic quality of the original signal,*” does not, as Blue Spike asserts, seek to “incorporate all of the terms present in claims” (Op. Br. at 11), but instead is the only construction broad enough to encompass all of the dependent claims while remaining true to: (i) the claims themselves, (ii) the specifications, and (iii) the prosecution histories.

## **II. Match/Matches/Matched/Matching**

Term	Defendants	Blue Spike
A Match	“an indistinguishable copy”	No construction required.
Matches	“is indistinguishable from”	
Matched	“was indistinguishable from”	
Matching	“indistinguishable”	

The plain meaning of “match” in the field of computer searching and retrieval is an identical copy and nothing in the specification departs from that ordinary meaning.<sup>16</sup> In accordance with this ordinary meaning, the applicants used “matching” to mean the identification of only those abstracts that have “indistinguishable differences.” The claims are consistent with the ordinary meaning. For example, claim 3 of the ‘472 patent requires determining if the query abstract matches a stored reference abstract. 16:13-15. If a single stored reference abstract is indistinguishable against the query abstract, then a match is found. In other words, the patent only envisions 1-to-1 matches.

Blue Spike takes issue with this definition, arguing incorrectly that the specification

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<sup>16</sup> For example, see Higgins Decl. Ex. 9 (The IEEE Standard Dictionary of Electrical and Electronics Terms (6<sup>th</sup> Ed. 1997) which defines match as “(A) A condition in which the values of corresponding components of two or more data items are equal. See also: hit. (B) To compare two or more data items to determine whether their corresponding components are equal as in definition ‘A’.”).

envisions “1-to-many” matches.<sup>17</sup> Blue Spike’s argument, however, is a red herring. In fact, the specification treats situations where an abstract no longer differentiates between different signals as a *problem* to be avoided. The specification describes a process to resolve this problem, called “recalibration.” As explained in the patent, if the claimed system identifies more than a single match for an abstract, then the database of abstracts is “recalibrated to further differentiate the two objects stored in the database.” 11:20-23. That is, the goal of the invention described in the specification is always to get to the point where there is a 1-to-1 “match” according to the ordinary understanding of that term in the art.

The prosecution history confirms that the claim term “match” has the ordinary meaning proposed by Defendants. The recalibration process was used during prosecution to overcome a prior art rejection. Higgins Decl. Ex. 3 (‘175 FH Response to 10/24/11 OA) at 4 discussing claim 107 (“Burk does not disclose recalibrating when two abstracts in the database are *indistinguishable*. Accordingly we amend claim 107 to define the recalibration in this situation and to place it in independent form.”) (emphasis added). The amendment itself makes it clear that it was the term “match” that the applicants were defining – “recalibrate said database in response to determination that said digital reference signal abstract matches one of said plurality of digital reference signal abstracts in said database.” Thus, “match” means that two abstracts are indistinguishable. After defining, “match” in the specification and reemphasizing the requirement of a complete match to gain allowance of the patent, Blue Spike cannot now disclaim the term’s meaning. *See, e.g., Phillips v. AWH Corporation, et al.*, 415 F.3d 1303 (Fed. Cir. 2005); *ERBE Elektromedizin GmbH v. Canaday Tech. LLC*, 629 F.3d 1278, 1285-87 (Fed. Cir. 2010); *Seachange Int’l*, 413 F.3d at 1373-74.

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<sup>17</sup> Defendants understand Blue Spike’s distinction between 1-to-1 and 1-to-many to refer simply to the ability to identify a single match versus multiple matches.

In addition to the “recalibration” example, the specification also includes other means of ensuring that all abstracts in the database are distinguishable so that only one match is returned per query. For example, cryptographic protocols may be implemented to further enhance the uniqueness of the generated abstracts. 14:19-27 (referring to “cryptographic protocols, such as a hash or digital signature, [that] can be used to distinguish such close cases.”). These cryptographic protocols ensure that a match means a match and requires only one match.

Blue Spike argues, without support, that abstracts “match a version of a signal to an original signal. They even match similar signals and indicated [sic] how and to what degree those signals are related.” Op. Br. at 13. Blue Spike again provides no citations to the intrinsic record for its position. Abstracts, however, are nothing more than a set of data in which an abstract has different data than all other abstracts. By Blue Spike’s own definition, and as described below, a “version” is not a “match.” Thus, Blue Spike’s discussion about “abstracts” and “versions” is irrelevant to the meaning of the term “match.”

### **III. A Comparing Device / Device Configured to Determine**

<b>Term</b>	<b>Defendants’ Construction</b>	<b>BS Construction</b>
A comparing device that compares/ a comparing device....that compares/ a comparing device for comparing	Means plus function.  Function: comparing  Structure: no structure or algorithm disclosed.  To the extent the Court determines this term is not means-plus-function, Defendants propose this term is indefinite. To the extent the Court finds this term is not indefinite, Defendants propose: “A separate hardware component of the computerized system [that compares/for comparing/able to compare]”.	Not governed by §112 ¶6.
A device configured to determine if a query signal matches any one plurality of reference signals	Means plus function.  Function: determine if a Query Signal matches any one plurality of Reference Signals  Structure: no structure or algorithm disclosed.  To the extent the Court determines this term is not means-plus-function, Defendants propose this term is	No construction required.

Term	Defendants' Construction	BS Construction
	indefinite. To the extent the Court finds this term is not indefinite, Defendants propose: “A separate hardware component of the computerized system configured to determine if a Query Signal Matches any one plurality of Reference Signals”.	

The disputed phrases are means-plus-function limitations governed by 35 U.S.C. §112 ¶ 6 (pre-AIA) . The Federal Circuit has routinely held that generic terms like “device” should be treated as means-plus-function under §112 ¶ 6. The terms “comparing device that compares,” “a comparing device for comparing” and “device configured to determine” are generic and do nothing more than describe functions—comparing and determining. However, it is critical under Section 112 ¶ 6 that the patent’s specification describe “structure” corresponding to such functions. The specification in the patents-in-suit does not describe any structure for performing the functions of comparing a query signal abstract to the reference signal abstracts and determining if a match exists. Accordingly, these means-plus-function limitations lack the required corresponding structure, and therefore all claims including these limitations are invalid.

**A. The Disputed Claim Phrases Are Means-Plus-Function Limitations Because The Terms “Device That Compares,” “Comparing Device” And “Device Configured To Determine” Do Not Connote Any Structure And Are Mere Stand-Ins For The Term “Means.”**

“Means-plus-function” claiming is a convenience for patent drafters, authorized by 35 U.S.C. § 112 ¶ 6 (pre-AIA), that allows patentees to express claim limitations in functional terms “without requiring the patentee to recite in the claims all possible structures” able to perform the function.” *Medical Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003). However, when claims are drafted this way, patent drafters are strictly required to disclose a corresponding structure in the patent specification that is clearly linked to the function stated in means-plus-function claim limitation. *Id.* The claim’s scope is limited to that disclosed structure, and equivalents. *Id.* “If the specification is not clear as to the structure that

the patentee intends to correspond to the claimed function” then the claim is impermissibly indefinite, and invalid. *Id.*

The disputed claim phrases “comparing device that compares,” “a comparing device for comparing” and “device configured to determine” are governed by 35 U.S.C. §112 ¶ 6 (pre-AIA). Normally, there is a rebuttable presumption that section 112 ¶ 6 does not apply to a claim limitation that does not use the term “means” *Phillips*, 415 F.3d at 1311. However, the presumption is overcome if the claim uses a generic term, such as “device,” that is a substitute for the term “means for” carrying out some function and which provides no more structure than the word “means.” *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1360 (Fed. Cir. 2004). That is precisely what is happening here. The word “device” generically refers to carrying out the functions of comparing and determining, but does not connote any definite structure for doing so. *See MIT v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006) (citing *Personalized Media Comm. v. Int'l Trade Comm'n*, 161 F.3d 696, 704 (Fed. Cir. 1998)) (equating “device” with “means,” explaining that both are “generic” terms that “typically do not connote sufficiently definite structure.”); *Ergo, Licensing, LLC v. Carefusion 303, Inc.*, 673 F.3d 1361, 1363-64 (Fed. Cir. 2012) (same); *Widevine Techs., Inc. v. Verimatrix, Inc.*, 2009 U.S. Dist. LEXIS 102768, at \*39-41 (E.D. Tex. Nov. 4, 2009) (Ward, J.) (same).

Stating that the device is for “comparing” or “configured to determine” does not change the analysis, as those words only indicate the function of the device (*i.e.* the device is either comparing or determining). *See Biomedino, LLC v. Waters Tech. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007) (“control means” did not escape means-plus-function treatment because “control” was just an adjective describing what the “means” did, not a structure); *Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1232 (Fed. Cir. 2001) (“air circulating means ... for circulating air” recites function not structure). Furthermore, the specification provides no insight into the

meaning of “comparing device” or “device configured to determine” nor does it indicate that these terms are understood within the art to connote a known structure. *See Mass. Inst. of Tech.*, 462 F.3d at 1354 (finding the term “colorant selection mechanism” to be a means-plus-function element because the term is not defined in the specification and “there is no suggestion that it has a generally understood meaning in the art.”). Thus, like *Personalized Media* and *MIT*, this is a case where a claim nakedly recites a “device” and the written description fails to place clear structural limitations on that “device.” As a result, section 112 ¶ 6 applies to these claim terms.

**B. Because The Specification Fails To Provide Sufficient Structure For Performing The Claimed Function, The Disputed Claim Phrase Is Indefinite.**

Because the specification of the asserted patents fails to disclose any structure for performing the claimed function of comparing a query signal abstract to the reference signal abstracts in order to determine if a match exists, the claim is indefinite as a matter of law. *See Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1302 (Fed. Cir. 2005) (finding no structure disclosed and stating that “the testimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification”); *Blackboard, Inc. v. Desire2Learn Inc.*, 574 F.3d 1371 (Fed. Cir. 2009) (claim indefinite where no structure disclosed and the specification merely referred to “an abstraction that describes the function [set forth in the claim], which is performed by some undefined component of the system.”); *Widevine Techs., Inc. v. Verimatrix, Inc.*, 2009 U.S. Dist. LEXIS 102768, at \*39-44 (E.D. Tex. Nov. 4, 2009) (Ward, J.) (means-plus-function claim term indefinite because the specification lacked corresponding structure).

The specification does not describe the structure for the “comparing device” or “device configured to determine.” The only instance where “a comparing device” is discussed in the specification, the language merely rewords the *function* recited in the claim and says nothing about the “comparing device” *structure* that performs this function:

the comparing device which is able to compare the selected object using the features selected by the feature selector to the plurality of signals in the reference database to identify which of the signals matches the monitored signal.

‘472 patent at 8:55-59.

Blue Spike attempts to sidestep the complete absence of structure in the specification by arguing that one of ordinary skill in the art would nevertheless understand what a “comparing device” or “device configured to determine” may be. That argument fails as a matter of law. The definiteness test is not satisfied simply because a person of ordinary skill in the art “would be capable of implementing a structure.” *Biomedino*, 490 F.3d at 953. Rather, what matters “is whether one of skill in the art would understand the specification *itself* to disclose a structure.” *Id.* (emphasis added); *see also ePlus*, 700 F.3d at 519 (“The indefiniteness inquiry is concerned with whether the bounds of the invention are sufficiently demarcated, not with whether one of ordinary skill in the art may find a way to practice the invention.”). Blue Spike attempts to provide three dictionary definitions purporting to show what a “comparator” is. Beyond the fact that such external evidence is irrelevant, it is even more attenuated because Blue Spike requires that one of skill make the unwarranted leap to know that a “comparator” is the “comparing device” of the patents. Further, the definitions provide no clear structure for a “comparator,” let alone a comparing device. One of skill in the art would be left to guess whether a comparing device is software, hardware, logic, or a circuit. Blue Spike’s argument fails.

#### **IV. Related To**

<b>Term</b>	<b>Defendants’ Construction</b>	<b>BS Construction</b>
Related to	“Matches”	No construction required.

The Blue Spike patents include no description of how one abstract can be “related to” another abstract. The only disclosure in the specification for comparisons of abstracts is for 1-to-1 matching as described above (*see* Section II) and a match to different versions of a reference

signal using an “index of relatedness.”<sup>18</sup> Thus, the only way to potentially preserve the validity of the claims containing the term “related to” is to construe it to mean “matches.”

Blue Spike, however, argues that “related to” implies similarity, not equality. While that may be true when taken out of context, the claim would then not be enabled because there exists no support in the specification to identify something that is “close” or then how close must something be to be “related.” The disclosure provides no answers, so Blue Spike’s interpretation renders the claim indefinite. Accordingly, Blue Spike’s argument must be rejected.

## **V. A Compare Result**

<b>Term</b>	<b>Defendants’ Construction</b>	<b>BS Construction</b>
A compare result	“data that indicates whether a Match between two Abstracts was found”	No construction required.

Defendants’ construction of “a compare result” incorporates its constructions for “abstract” and “match.” Blue Spike’s only complaint with Defendants’ construction is that it incorporates the “1-to-1 match” from the definition of “match.”<sup>19</sup> Accordingly, all disputes with respect to this term have been addressed above. To the extent the Court resolves the dispute regarding the terms “abstract” and “match,” this term need not be construed further.

## **VI. Versions of [the] Reference Signal**

<b>Term</b>	<b>Defendants’ Construction</b>	<b>BS Construction</b>
Versions of [a/the/said/“that one of said plurality of”] reference signal[s] <sup>20</sup>	“multiple variations of a particular Reference Signal”	No construction required.

<sup>18</sup> “Index of relatedness” is indefinite for reasons similar to why “related to” can only mean “match.” That is, there is no support in the specification or guidance to one of ordinary skill in the art to perform anything other than a 1-to-1 match. *See* Defendants’ Motion for Summary Judgment of Indefiniteness.

<sup>19</sup> Blue Spike oddly asserts that “Abstracts as defined in the patents-in-suit, are designed to produce more than a 1-to-1 match...” Op. Br. at 14. Blue Spike, however, rested its position of “abstract” on it being “impossible” to define the term. This is yet another instance of Blue Spike contradicting itself between terms.

<sup>20</sup> As explained below, this term covers “versions of the reference signal” in claims 1 and 40 on the ‘700 patent, and claim 11 of the ‘494 patent; “versions of said reference signal” in claim 1 of

In one or more iterations, the asserted claims of the '494 and '700 patents require differentiation among “versions” of “[the] reference signal”:

- “versions of the reference signal” ('700 patent, cls. 1, 40; '494 patent, cl. 11);
- “versions of said reference signal” ('494 patent, cl. 1); and
- “versions of that one of said plurality of reference signals” ('494 patent, cl. 29).

The multiple of the former conjoined with the singular of the latter can only mean: “multiple variations of a ***particular*** Reference Signal.”

First, all of these formulations—“the”, “said”, and “one of said plurality of”—share the singularity of the “reference signal.” Precedent and ordinary parlance dictate that these claim terms require one particular reference signal. *See Real v. Bunn-O-Matic Corp.*, 100 F. Supp. 2d 844, 862 (N.D. Ill. 2000) (“The relevant dictionary definition of the term ‘the’...is ‘used before singular or plural nouns and noun phrases that denote particular persons or things.’”); *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1350 (Fed. Cir. 1999) (“The plain meaning of ‘selecting *one of said* . . . numbers’ is selecting a single number, not a combination of numbers”).

Second, all of the above formulations recite “versions” in the plural, indicating that there are multiple versions. *See, e.g., Electro. Sci. Indus. v. Dynamic Details, Inc.*, 307 F.3d 1343, 1349 (Fed. Cir. 2002) (stating that “Claims 22 and 30 clearly require multiple circuit boards in view of their plural language and this prosecution history.”); *Wi-LAN Inc. v. HTC Corp.*, 2014 U.S. Dist. LEXIS 45819, at \*18 (E.D. Tex. Apr. 2, 2014) (construing “plural sets” to include corresponding phrase “multiple groups”). In addition, the specification itself equates “versions” with “variations”:

In one embodiment of the invention, the abstract of a signal may be generated by

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the '494 patent; and “versions of that one of said plurality of reference signals” in claim 29 of the '494 patent. For simplicity, we use “versions of [the] reference signal” throughout.

the following steps: 1) analyze the characteristics of each signal in a group of audible/perceptible *variations* for the same signal (e.g., analyze each of five *versions* of the same song--which versions may have the same lyrics and music but which are sung by different artists);....

‘472 patent at 3:63-4:2 (emphasis added). The intrinsic evidence thus confirms Defendants’ construction, “multiple variations of a particular reference signal,” which should be adopted.

Blue Spike ignores the term designated for this Court’s construction, in favor of speculating at length about the meaning of “version” alone, without previously providing any disclosures on its position. Blue Spike’s argument is irrelevant, however, because the claims do not merely require “versions”—they require “versions of [the] reference signal.” Blue Spike’s argument is also legally improper, because the specification may never be used to *expand* the meaning of the claims. *See, e.g., McClain v. Ortmayer*, 141 U.S. 419, 423-24 (1891) (“The claim is the measure of his right to relief, and, while the specification may be referred to limit the claim, it can never be made available to expand it.”); *Ecolab, Inc. v. Paraclipse, Inc.*, 285 F.3d 1362, 1373–74 (Fed. Cir. 2002). In particular, Blue Spike attempts to expand the claim language to include its brand-new, unsupported theories on the substance of the Asserted Patents combined with unclearly-cited examples from the specification.

Specifically, Blue Spike claims that “‘versions’ may relate to a reference signal...but not be derived from the signal itself per se,” positing that the reference signal is the “original song” and “each ‘version’ is a separate rendering by a separate artist.” Op. Br. at 19. These unsupported examples, however, find no room within the paradigm of the claims, which again require “versions of [the] reference signal.” There is no evidence—and Blue Spike cites to none—to support the proposition that a reference *signal*, as used in the asserted claims, can be a disembodied “original song” with no particular ability to be identified in its own right. Indeed, the specification indicates otherwise, because it requires the “original song” to be recorded in a medium in order to be abstracted and analyzed: “[t]he present invention, however, is directed to

the identification of a digital signal—whether text, audio or video—using only the digital signal itself and then monitoring the number of times the signal is duplicated.” 4:56-59. Thus, even if a reference signal did comprise an original song performed by an artist, the “versions of [that] reference signal” could only comprise variations of a particular recording—not the attenuated and unsupported example proposed by Blue Spike of the same lyrics sung by different artists.

Moreover, now that Defendants’ are finally apprised of Blue Spike’s position that a version need not even be derived from the signal itself, the term is further indefinite as subjective. *Prolifiq Software, Inc.*, 2014 WL 3870016, at \*5-7 (finding claims indefinite where patents provided examples of “‘differently versioned’ digital content elements, such as a video version of a digital content element as opposed to a flash version of a digital content element,” but provided no “objective standard for determining what is meant by the term ‘differently versioned,’” thus impermissibly depending on the “unrestrained, subjective opinion of the person practicing the invention”).

## VII. Selectable Criteria

Term	Defendants’ Construction	BS Construction
Selectable criteria	“Rules available for selection, which create different Abstracts for a particular reference signal”	“criteria that is selectable”

“Selectable criteria” is recited in claim 11 of the ’472 patent. The claim language explains that the processor uses “selectable criteria” to create an abstract. It necessarily follows that the abstract created by the processor will be different depending on which of the available criteria is selected. As a result, “selectable criteria” can only mean “rules available for selection, which create different abstracts for a particular reference signal.”

Blue Spike’s construction—“criteria that is selectable”—does not actually define this term so much as rearrange it. Blue Spike also does not cite a single piece of evidence to support its grammatically incorrect construction. Instead, Blue Spike asserts that the “criteria may be

selected by the user.” Op. Br. at 20. There is no support in the specification or in the prosecution history regarding criteria being selected by a user. Additionally, Blue Spike asserts that “[t]here is no indication in the record that the criteria must be rules rather than variable, or that the criteria must necessarily generate different abstracts.” Op. Br. at 20. This assertion is wrong on both counts.

First, because the processor uses the “selectable criteria” to create the abstract, these criteria are in fact “rules” for the processor to apply, and the processor selects the rules to be applied. *See id.* at Abstract (“the method by which abstracts are generated can be programmable based upon selectable criteria”); *see also id.* at 13:16-22 (“Perceptual differences exist between a song and its reproduction from a CD, an AM radio, and an Internet broadcast. To the extent that the creator or consumer of the signal can define a difference in any of the four criteria above, means can be derived (and programmed for selectability) to recognize and distinguish these differences.”).

Second, the specification explains that “if an artist releases a second performance of a previously recorded song, and the two performances are so similar that their differences are almost imperceptible, then the *previously selected criteria* may not be able to differentiate the two recordings.” *Id.* at 11:14-18 (emphasis added). Thus, to make such a differentiation, different criteria must be selected to generate Abstracts that are different from those Abstracts that were created using the previously selected criteria.

### VIII. Reference Signal

Term	Defendants' Construction	BS Construction
Reference signal	“An uncompressed signal representing an entire work”	“a signal that is being referenced”

Defendants’ proposed construction of “reference signal” reflects two important concepts that are emphasized in the specification of the patents-in-suit: (1) a reference signal represents

an entire work and (2) a reference signal has not undergone compression. The term “reference signal” appears in many claims of the patents-in-suit. An exemplary usage is in claim 3 of the ’472 patent:

A method for monitoring and analyzing at least one signal comprising:  
receiving at least one **reference signal** to be monitored;  
creating an abstract of said at least one **reference signal**;  
storing the abstract of said at least one **reference signal** in a reference database; . . .

*See also* ’472 patent cl. 8, 11; ’700 patent cls. 1, 40; ’494 patent cls. 1, 11, 29; ’175 patent cls. 8, 11, 17. Blue Spike incorrectly argues that “there is no reason why a reference signal could not be a notable portion of a public speech, a key subset of a painting, or the chorus of a song.” Op. Br. at 21. Blue Spike does not cite to any intrinsic evidence to support its assertion and ignores the patents-in-suit’s specification, which limits “reference signal” to an entire work. *See Phillips*, 415 F.3d at 1313 (claims must be read in light of the full specification).

The patents’ specification defines “reference signal” as the work: “the creator’s work itself is used as the monitoring signal.” 6:50–51. A reference signal cannot be a portion of a work because the patent applicant expressly defined “reference signal” as the *entire* work, and defined a portion of an entire work as an “object.” The specification states that a “segmented portion” of a reference signal “is also referred to as an ‘object.’” “As such, the signal being monitored may be thought of comprising a set of objects.” 8:33–35. A portion of a signal is defined in the specification as an “object,” not a signal, and a portion of a work cannot be a signal. Further, the specification refers to a segment of a song as “a segment of the original signal” rather than as a separate and distinct signal. 11:47–48. Thus, the specification supports Defendants’ construction of “reference signal” as encompassing “an entire work.” *See Phillips*, 415 F.3d at 1316 (patentee acts as his own lexicographer when he defines terms in the specification). Blue Spike provides no intrinsic (or extrinsic) evidence to refute that

construction. And Blue Spike's construction is flawed because it just rearranges the words of the claims and provides no guidance for the term's meaning. *See Harris Corp. v. IXYS Corp.*, 114 F.3d 1149, 1152 (Fed. Cir. 1997) (a construction that results in a circular definition is incorrect).

The specification also makes it clear that a reference signal has not undergone the compression that an abstract has undergone. The patents' specification refers to the "original, uncompressed signal." *See* 5:34-39. In other words, the original signal has not undergone the compression required to make an abstract (*See* § I, above.) Defendants' construction captures this feature of the reference signal.

## **IX. Query Signal**

<b>Term</b>	<b>Defendants' Construction</b>	<b>BS Construction</b>
Query signal	"An uncompressed signal representing an entire work to be analyzed"	"a signal being monitored or analyzed"

A "query signal," like a "reference signal" is an uncompressed signal that represents an entire work—a concept that Blue Spike's construction excludes. (*See* § I, above.) Blue Spike's construction is also incorrect because it does not differentiate between a query signal and a reference signal. A query signal differs from a reference signal because it is a signal that the claimed invention receives ***to be analyzed***. The claimed invention takes in a query signal to analyze, create its abstract, and compare that abstract against the abstract of a reference signal:

receiving at least one **query signal** ***to be analyzed***;  
creating an abstract of said at least one **query signal**;  
comparing the abstract of said at least one **query signal** to the abstract of said at least one reference signal to determine if the abstract of said at least one **query signal** matches the abstract of said at least one reference signal;

'472 patent, claim 3. *See also* '700 patent cl. 1, 40; '494 patent cl. 1, 11, 29. Blue Spike's construction conflicts with the claim language and the specification because it uses monitor **or** analyze. The patents-in-suit require *both* monitoring a reference signal *and* analyzing a query signal—and these distinct steps should not be conflated. *See* '700 patent cl. 1; 14:41-42

(describing an “application for monitoring **and** analyzing visual images.” (emphasis added)).

## X. Reference Database

Term	Defendants	Blue Spike
Reference Database	“A database containing Abstracts for a predefined set of Reference Signals”	“a database that contains references”

In its brief Blue Spike retreats from its proposed construction above, and offers a new one, that a reference database “is merely ‘a database containing abstracts of reference signals.’” Op. Br. at 21. Following this concession, Blue Spike argues only that Defendants’ proposed “‘predefined set’ limitation is representative of the prior art, not the patents-in-suit.” *Id.*

Blue Spike’s argument is irrelevant and contrary to the specification’s description of the “present invention.” Descriptions of “the present invention” as a whole limit the claims even if the claim language, standing alone, might be interpreted differently. *SciMed Life Sys., Inc. v. Adv. Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001).<sup>21</sup> The specification states that the “present invention” improves over the prior art because of its abstract. *See* ‘472 patent at 10:10-16. The abstract is described as “the smallest amount of data . . . which can represent and differentiate two digitized signal representations for a given ***predefined signal set***.” *See* ‘472 patent at 10:13-16 (emphasis added). For the “present invention” to have this benefit, the reference database must store abstracts for a *predefined set* of reference signals. (*See also* § I.iv, above) Otherwise, the “present invention” would not have any basis for differentiating “two digitized signal representations” based upon the “smallest amount of data.”

## XI. Creating at least one counter corresponding to one of said at least one reference signal & Incrementing the counter ... when a match is found / First digital reference signal abstract match recorder

<sup>21</sup> *See also Honeywell Int’l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (limiting claims to a fuel filter where “the written description refers to the fuel filter as ‘this invention’ or ‘the present invention’”).

<b>Term</b>	<b>Defendants' Construction</b>	<b>BS Construction</b>
Creating at least one counter corresponding to one of said at least one reference signal	“creating an element used for counting, which corresponds to a particular Reference Signal”	No construction required.
Incrementing the counter....when a match is found	“increasing the value of the element used for counting when a Match is found”	No construction required.
First digital reference signal abstract match recorder	“an element used for counting, which corresponds to a particular Abstract”	No construction required.

Blue Spike only objects to Defendants' construction of the claimed counter or recorder as an “element.” However, this is less important than the point that should be clarified for the jury: that each “counter” (or “recorder”) corresponds to one (and only one) reference signal and its associated abstract. Mr. Moskowitz added and distinguished these terms over the prior art during prosecution. *See, e.g.*, Higgins Decl. Ex. 2 at 4, 6; Higgins Decl. Ex. 3 ('175 FH Response to 10/24/11 OA) at 5. Indeed, the Patent Office even deemed the distinction necessary for allowance of claims 3 and 8 of the '472 patent. *See, e.g.*, Higgins Decl. Ex. 2 at 10. Specific evidence compelling Defendants' construction is set forth below by claim term.

**A. Creating an element [or counter] used for counting, which corresponds to an abstract of a particular reference signal, and increasing the value of the element [or counter] used for counting when a Match is found**

The claim language itself compels defendants' proposed construction. When reading the terms in the context of the entire claim in which it is found,<sup>22</sup> the phrase “one of said at least one reference signals [sic]” recited in claim 3 of the '472 patent (as well as the similar phrase “one of said plurality of reference signals” recited in claim 8 of the '472 patent) refers to *only one* reference signal, *i.e.*, the *particular* reference signal.

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<sup>22</sup> *See Hockerson-Halberstadt, Inc. v. Converse Inc.*, 183 F.3d 1369, 1374 (Fed. Cir. 1999) (“Proper claim construction . . . demands interpretation of the entire claim in context, not a single element in isolation”); *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered . . .”).

‘472 patent, Claim 3	‘472 patent, Claim 8
creating at least one counter corresponding to one of said at least one reference signals, said at least one counter being representative of the number of times a match is found between the abstract of said at least one query signal and the abstract of said at least one reference signal; and	creating at least one counter corresponding to one of said plurality of reference signals, said at least one counter being representative of the number of times a match is found between the abstract of said at least one query signal and an abstract of one of said plurality of reference signals; and
incrementing the counter corresponding to a particular reference signal when a match is found between an abstract of said at least one query signal and the abstract of the particular reference signal.	incrementing the counter corresponding to a particular reference signal when a match is found between an abstract of said at least one query signal and the abstract of the particular reference signal.

Further, the specification also indicates that the “counter” is used for counting the number of times a reference signal has been detected as a result of comparing abstracts of query signals with the abstract of the particular reference signal.<sup>23</sup> The counter is, thus, incremented when a query signal abstract matches the abstract of the particular reference signal. *See, e.g.*, 16:17-26. As such, only matches to the abstract of the particular reference signal are counted, not matches to any other abstract.

In view of the above, the term “creating at least one counter corresponding to one of said at least one reference signals [sic]” (as recited in claim 3 and as similarly recited in claim 8) means “creating an element [or counter] used for counting, which corresponds to a particular Reference Signal,” and that is representative of the number of times a match is found between an abstract of a query signal and the abstract of the particular Reference Signal. Likewise, the term “incrementing the counter . . . when a match is found” (as recited in claims 3 and 8) means “increasing the value of an element [or counter] used for counting when a Match is found” between an abstract of the query signal and the abstract of the particular reference signal.

**B. “[A]n element [or a recorder] used for counting, which corresponds to a particular Abstract.”**

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<sup>23</sup> *See, e.g.*, 8:55-9:15, stating, “[t]he fourth element is the comparing device which is able to ... process the selected object..., and then compare the processed selected object to the processed signal information [stored in the database]” and “[t]he fifth element is the recorder which records information about the number of times a given signal is analyzed and detected.”

This term of dependent claim 15 of the '175 patent is similar to the counter term recited in claims 3 and 8 of the '472 patent. Claim 15 recites that the “first digital reference signal abstract match recorder . . . [records] a number of times said at least one processor determines a match between a digital query signal abstract and first [sic] digital reference signal abstract of said plurality of digital reference signal abstracts.” 17:49-53. Thus, when reading the above-captioned term in the context of the entire claim in which it is found, the phrase “first digital reference signal abstract” indicates that the “match recorder” corresponds to only one particular abstract, *i.e.*, the “first digital reference signal abstract.” Nothing in the intrinsic record, or in any extrinsic record, indicates that the “match recorder” corresponds to multiple abstracts. In light of the foregoing, “first digital reference signal abstract match recorder” means “an element [or a recorder] used for counting, which corresponds to a particular Abstract.”

## **XII. Distributing At Least One Signal Based on the Comparison Step**

<b>Term</b>	<b>Defendants' Construction</b>	<b>BS Construction</b>
Distributing at least one signal based on the comparison step	“delivering at least one signal resulting from the comparison to multiple recipients”	No construction required.

Method claim 51 of the '700 patent and system claim 22 of the '494 patent both require “distributing at least one signal based on the comparison step.” The intrinsic and extrinsic evidence supports Defendants’ construction—“delivering at least one signal resulting from the comparison to multiple recipients.”

Intrinsically, the specification envisions “methods for faster and more accurate auditing of signals as they are played, *distributed* or otherwise shared amongst providers (transmitters) and consumers (receivers).” 7:67-7:3 (emphasis added); *see also id.* at 2:9-12; 2:16-21 (discussing the protection and distribution of copyrighted content). “Distributing,” as the intrinsic evidence confirms, means delivering of at least one signal (such as “copyrighted content”) to multiple recipients (such as “consumers (receivers)”).

Extrinsically, Defendants' construction is also supported by the dictionary definition of "signal distributing": "[d]elivering of signals from a common control to other circuits". Higgins Decl. Ex. 9 (IEEE Standard Dictionary of Electrical and Electronics Terms (6th Ed. 1997)).

Blue Spike addresses none of this evidence, instead offering this unsupported and irrelevant hypothetical: "A 401(k) does not likely distribute to more than one person; it distributes to the owner." Op. Br. at 23. This fails to disprove the fact that "distributing," when used in the context of the Asserted Patents, means delivery to multiple recipients.

### **XIII. Perceptual Characteristics Representative Of Parameters / Signal Characteristic Parameters**

<b>Term</b>	<b>Defendants' Construction</b>	<b>BS Construction</b>
perceptual characteristics representative of parameters to differentiate between versions of the reference signal	"Perceptual characteristics, which represent parameters, that distinguish multiple Versions of the same Reference Signal"	perceptual characteristics representative of parameters to differentiate between versions of the reference signal... - No construction required
signal characteristic parameters configured to differentiate between versions of said reference signal	"parameters that characterize a signal that distinguish between multiple Versions of the same Reference Signal"	No construction required given the length of this proposed phrase.  reference signal – "A signal that is being referenced." [addressed above].
signal characteristic parameters configured to differentiate between a plurality of versions of the reference signal.	"parameters that characterize a signal that distinguish between multiple Versions of the same Reference Signal"	No construction required.
signal characteristic parameters configured to differentiate between other versions of that one of said plurality of reference signals	"parameters that characterize a signal that distinguish between multiple Versions of the same Reference Signal"	No construction required.
signal characteristic parameters that differentiate between said plurality of different versions of said visual work and said multimedia work	"parameters that characterize a signal that distinguish between multiple Versions of a single visual work and multimedia work"	No construction required.

Blue Spike contests only one aspect of Defendants' construction: the word "distinguish." Op. Br. at 24. Thus, the main focus for this definition is whether the word "differentiate" in the claims is narrower than the ordinary meaning of "distinguish." Defendants' proposed construction is derived from the specification, and uses the word "distinguish" consistent with the specification's description of "signal characteristic parameters." *See e.g., Phillips*, 415 F.3d at 1312-14 (*en banc*) (claims must be read in view of the specification). The specification common to all patents-in-suit does not use the phrase "signal characteristic parameters." The closest disclosure relates to the description of distinguishing stored digital signals:

The signal identifier/detector should receive its *parameters* from a database engine. The engine will identify those *characteristics* (for example, the differences) that can be used to *distinguish* one digital *signal* from all other digital *signals* that are stored in its collection.

*See, e.g.*, 10:20-24 (emphasis added).

Defendants' proposed construction makes the claim language understandable to a lay juror and explicitly states what that language means. For instance, the phrase "signal characteristic parameters" is more intelligible as "parameters that characterize a signal," consistent with the specification. *See* 10:20-24. As discussed above, the phrase "versions of said reference signal" is explicitly defined to mean "multiple Versions of the same Reference Signal," consistent with the specification.<sup>24</sup> Notably, Blue Spike has not disputed these aspects of Defendants' proposed constructions.

Without citing any support from the specification (because the specification does not offer support), Blue Spike argues that *differentiate* means "to ascertain what makes something different" and that *distinguish* means "to merely recognize that something is different." *Id.* at 24.

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<sup>24</sup> *See, e.g.*, Col. 7:14-18 ("distinguish between the various recorded versions of the song, say, for example between Billy Joel's recording and Barbara Streisand's recording" of the Billy Joel song "New York State of Mind").

Blue Spike argues that substituting these terms is an “attempt to strip the patents-in-suit of the 1-to-many capabilities that distinguish it from prior art.” *Id.*

Defendants have already addressed the 1-to-many argument above. As for the rest of its argument, contrary to Blue Spike’s position, the specification and prosecution history use the terms *differentiate* and *distinguish* interchangeably. For example, the specification uses both words to describe determining which version of a song has been played. *Compare* 8:24-27 (“***differentiate*** one version of a work of art from another version of the same work of art, such as two or more versions of the same song, but by different artists”) (emphasis added) and 7:14-18 (“***distinguish*** between the various recorded versions of the song, say, for example between Billy Joel’s recording and Barbara Streisand’s recording” of the Billy Joel song “New York State of Mind”) (emphasis added).

Similarly, Mr. Moskowitz argued for patentability during prosecution of the ’175 patent suggesting that *differentiate* and *distinguish* are interchangeable. He used the term “indistinguishable” in a reply to an Office Action when referencing language from the specification that only used the term “differentiate.” *See* Higgins Decl. Ex. 3 at 4 (a cited reference “does not disclose recalibrating when two abstracts in the database are ***indistinguishable***”) (emphasis added) and *id.* (“the database may need ‘recalibration’ to further ***differentiate*** the two objects stored in the database”) (emphasis added). He thus argued that *differentiate* and *distinguish* mean the same, and Blue Spike should be held to that meaning.

#### XIV. Recognizable Characteristics

Term	Defendants’ Construction	BS Construction
Recognizable characteristic	“characteristic visually or aurally perceived by a person”	No construction required.

“Recognizable characteristic” appears in a list of other characteristics: “a perceptible characteristic, a cognitive characteristic, a subjective characteristic, a perceptual quality, a

recognizable characteristic, or combinations thereof.” ’700 patent cl. 8, ’494 patent, cl. 18. Blue Spike agreed to constructions for each of the other list elements recited therein. Using the same agreed-upon format, “recognizable characteristic” should be construed to mean “characteristic visually or aurally perceived by a person.”

No evidence supports Blue Spike’s speculation that “[i]t is equally plausible that the term can be recognized by a machine,” and Blue Spike cites to none in its Opening Brief. Op. Br. at 25. In fact, the intrinsic evidence is to the contrary, because the Asserted Patents emphasize recognition by humans in the alleged invention. For example, the specification discusses the difficulty of modeling “the processes of the highly effective ability of humans to identify and recognize a signal.” 4:32-36. The specification also explains a model that “attempts to represent a visual image with less data, and yet preserve those perceptual qualities that permit a human to recognize the original visual image.” *Id.* at 14:58-61. *See also id.* at 6:48-53; 8:41-54. Blue Spike’s unsupported attempt to expand “recognizable” beyond what can be perceived by a human should thus be rejected.

Because the relevant claims are directed to other characteristics that the parties agree are perceived by a person, and because there is no other way for a person to perceive a signal besides seeing or hearing it, a recognizable characteristic is one that a person sees or hears.

## XV. Cryptographic Protocol

Term	Defendants’ Construction	BS Construction
Cryptographic protocol	“An agreed upon procedure for transforming data in order to secure it”	No construction required.

Claims 10, 11, 49 and 50 of the ’700 patent, and claims 20 and 21 of the ’494 patent, recite application of a “cryptographic protocol.”<sup>25</sup> Blue Spike declines to construe this term.

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<sup>25</sup> The claims of the ’494 patent should be construed in the same manner as those in the ’700 patent because claims in the former were deemed to be patentably indistinct from the claims in

Nevertheless, it asserts that Defendants' construction is incorrect because "cryptography does not intend [to] secure a signal completely, but only in transit." *See* Op. Br. at 26. This assertion is unsupported by any intrinsic or extrinsic evidence. Specific evidence compelling Defendants' construction is set forth below.

During prosecution of the '700 patent, Mr. Moskowitz repeatedly distinguished these claims from prior art technology based on the ability of cryptographic protocols to enhance the uniqueness of the abstracts. In that prosecution, the Examiner initially rejected originally filed claim 31 (asserted claim 10 of the '700 patent) as anticipated by an encryption mechanism disclosed in U.S. Patent No. 6,088,455 to Logan et al. *See* Higgins Decl. Ex. 4 ('700 FH 5/30/08 OA) at 7. In Mr. Moskowitz's first reply, under a heading entitled "Cryptographic Protocol," Mr. Moskowitz distinguished the encryption mechanism of Logan et al. from the claimed "cryptographic protocol" by stating that "the *claims* disclose cryptographic functions *to enhance uniqueness and identification.*" *Id.*; Higgins Decl. Ex. 5 at 21 (emphases added). This statement is supported by the specification. *See* '700 patent, 10:40-46, 13:63-14:4. Responsive to Mr. Moskowitz's reply, the examiner rejected claim 31 (and claim 64, which corresponds to asserted claim 49 of the '700 patent), contending that the claimed subject matter was taught in paragraph [0318] of U.S. Patent App. Pub. No. 2002/0073043 to Herman et al. *See* Higgins Decl. Ex. 6 at 11. Mr. Moskowitz thereafter distinguished the "claim[s]" from Herman et al., stating that the system of *Herman et al.* does not teach "enhancing uniqueness of an abstract, per se." Higgins Decl. Ex. 7 at 24.

Mr. Moskowitz's definition of "cryptographic protocol" is consistent with the commonly understood use of that term at the time: "the discipline embodying principles, means, and

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the latter. *See* Higgins Decl. Ex. 8 ('494 FH 8/20/10 OA at Office Action Summary) (box 6) and at 3.

methods for the *transformation of data* in order to *hide its information content, prevent its undetected modification, and/or prevent its unauthorized use.*<sup>26</sup> (emphases added). Defendants' construction derives from this language. In light of the foregoing intrinsic and extrinsic evidence, "cryptographic protocol" means "an agreed upon procedure for transforming data in order to secure it."

## XVI. Hash

Term	Defendants' Construction	BS Construction
Hash	"A mathematical transform that maps a bit string of arbitrary length to a fixed length bit string to achieve uniqueness"	A mathematical function that maps a bit string.

Blue Spike and Defendants agree that this term requires construction, but differ over whether the claimed hash is used "to achieve uniqueness."<sup>27</sup> The patent specification and comments made by Mr. Moskowitz to the Examiner use this term. The specification of the '700 patent describes a "hash" as an exemplary cryptographic technique, and states that a "hash . . . may be required" when "the data reduced abstract needs to have further uniqueness."<sup>28</sup> During prosecution of the '700 patent, Mr. Moskowitz reaffirmed that "the claims disclose cryptographic functions to enhance uniqueness . . ."<sup>29</sup> In light of the foregoing intrinsic evidence, "hash" means "a mathematical transform that maps a bit string of arbitrary length to a fixed length bit string to achieve uniqueness."

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<sup>26</sup> See Higgins Decl. Ex. 9 (The IEEE Standard Dictionary of Electrical and Electronics Terms (6th Ed. 1997)).

<sup>27</sup> The other elements of Defendants' construction seem to be agreed to. See Op. Br. at 27. Concerning these other terms, a "hash" is commonly known to refer to "a mathematical transform that maps a bit string of *arbitrary length* to a *fixed length* bit string" (emphases added). See, e.g., "hash function," as defined in the Digital Signature Standard, Federal Information Processing Standards Publication, United States Department of Commerce, FIPS PUB 186-4 (Attached as Exhibit 10 to the Higgins Decl.).

<sup>28</sup> The '700 patent at 10:40-46 and 13:63-14:4.

<sup>29</sup> Higgins Decl. Ex. 5 at 21. Despite Mr. Moskowitz stressing the uniqueness aspect of the claimed hash in the intrinsic evidence, Blue Spike now argues that this construction is incorrect. Again it makes an irrelevant argument ("different samples may produce identical samples (known in the art as 'collisions')") with no citation.

## XVII. Reduced in Size

Term	Defendants' Construction	BS Construction
Reduced in size	“compressed”	No construction required.

Blue Spike agrees that “[t]he patents-in-suit refer to ‘compression’ … throughout the specification.” Op. Br. at 27. And the specification confirms that “compression” was the form of data-reduction contemplated by the inventors. *See* 9:47-51, 7:36-55, 14:19-27.<sup>30</sup>

Rather than offering any construction for “reduced in size,” Blue Spike contends only that “the inventors intended not to use the term.” Op. Br. at 27. It then argues that a data reduction could be accomplished by a lower sampling rate, citing to a wholly irrelevant portion of the specification. This is hardly surprising because the specification only mentions compression to reduce the reference signals to abstracts. The inventors contemplated nothing else and the specification confirms that nothing else was envisioned to create an abstract. Accordingly, Defendants agree that the inventors should have used the term “compressed” in claim 16 of the ‘175 patent because “reduced in size” can have no other meaning.

## XVIII. Digital

Term	Defendants' Construction	BS Construction
Digital	Plain and ordinary meaning	“a series of binary digits—1’s and 0’s.”

The term “digital” has no special meaning in the patents-in-suit, and therefore, its plain meaning applies. That meaning, however, is not “a series of binary digits - 1’s and 0’s.” For example, the following text would fall under Blue Spike’s definition of digital: “101001010101.” That is, a series of binary digits, and all ones and zeroes. There is no way that a simple recitation

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<sup>30</sup> Blue Spike wrongly claims that “[a]n example of a signal reduced in size but not compressed is a song reduced by a lower sampling rate.” Op. Br. at 27. First, this passage does not support the assertion; all it states is that adjustments may need to be made to “songs or works of art which have been sampled or reproduced by others who are not the original creator.” ’175 patent at 10:32-35. Second, there is no evidence that the inventors intended this passage to be an example of an “abstract” that was “reduced in size” but not compressed.

of ones and zeroes on this page equates to “digital.” Thus, Blue Spike’s construction of “digital” and ultimately its construction of “digital fingerprint” are wrong.

## XIX. Similar to

Term	Defendants’ Construction	BS Construction
Similar to	Indefinite  To the extent the Court believes that this term is not indefinite, then Defendants propose: “looks or sounds the same as”	No construction required.

As explained in Defendants’ Indefiniteness MSJ, one of ordinary skill in the art reading the specification of the ‘472 patent cannot determine, with reasonable certainty, the meaning of “Similar To.” Thus, the term is indefinite. However, to the extent the Court finds this term is definite, Defendants propose this term means “looks or sounds the same as.” As noted above, signals can only be perceived visually or aurally. *See* Section XIV; *see also* 8:21-30; 10:9-11. Given this fact, the plain and ordinary meaning of the term must involve a visual or aural similarity between the reference signal and its abstract. Thus, Defendants’ construction should be adopted.

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**CERTIFICATE OF SERVICE**

I hereby certify that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document *via* the Court's CM/ECF system per Local Rule CV-5(a)(3) on September 9, 2014.

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